Free-to-play or Pay-to-play? The Role of Agentic and **Communal Orientations in Online Games**

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Abstract

Online games frequently rely on free features to boost gameplay engagement, assuming that increased engagement will naturally drive purchases. However, recent research reveals that engagement may also cannibalize purchases. This study applies agency and communion (A&C) theory to identify two distinct mechanisms influencing players' gameplay engagement and ingame purchases. We posit that agentic orientation—characterized by self-accomplishment and independence—enhances engagement more than communal orientation, whereas communal orientation—emphasizing social connection and interdependence—directly drives more purchases than agentic orientation. We conducted two studies using massively multiplayer online roleplaying games (MMORPGs) as a representative context. Study 1 employed sequential rule mining on gaming clickstream to identify A&C orientations and applied hierarchical Bayesian modeling to evaluate their impacts on engagement and purchases. Study 2 further validated the causal mechanisms using a classic scrambled sentence task to manipulate A&C orientations. This research contributes to the literature on online gaming monetization strategies by offering a nuanced understanding of the impact of user orientations and extends A&C theory by uncovering contextual moderators for online games (multiplayer vs. solo modes; ornamental vs. functional purchases). It provides actionable insights for industry practitioners on how to measure and strategically influence A&C orientations to optimize free-to-play business models.

Keywords: online gaming, agency and communion theory, free-to-play, gameplay engagement, in-game purchase, sequential rule mining, randomized controlled experiment

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